

Mineral Industry Surveys

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MOLYBDENUM IN MAY 2000

Domestic production of molybdenum in concentrate in May 2000 was about 8% more than that of the previous month and was 34% less than that of May 1999, according to the U.S. Geological Survey (USGS). Producer stocks of molybdenum in concentrate, oxide, and other product forms were 9,900 metric tons at the beginning of 2000, and 7,532 metric tons at the end of May.

Included in this Mineral Industry Surveys are U.S. production and shipments of molybdenum concentrates and materials, plus U.S. consumption, by end use, and stocks, by material, of molybdenum in the previous and current month; also included are trade data for the previous month. During the current month, the Platt's Metals Week U.S. monthly average price for molybdenum

concentrate was discontinued. The average price for dealer molybdenum oxide was \$5.583 per kilogram (\$2.533 per pound), and that for dealer ferromolybdenum was \$7.606 per kilogram (\$3.450 per pound). The USGS estimated average monthly price for molybdenum concentrate was \$3.75 per kilogram (\$1.700 per pound).

For the week ending July 21, 2000, the Platt's Metals Week average price for dealer molybdenum oxide was \$5.952 per kilogram (\$2.700 per pound), and that for ferromolybdenum was \$7.937 per kilogram (\$3.600 per pound). The USGS estimated price for molybdenum concentrate was \$4.00 per kilogram (\$1.80 per pound).

TABLE 1 U.S. SALIENT MOLYBDENUM CONCENTRATE STATISTICS 1/

(Metric tons, contained molybdenum)

	1999			
	January-			Year to
	December	April	May	date
Production	43,000	2,890 r/	3,020	14,500
Shipments: 2/				
Domestic	28,800	1,300	1,450	7,140
Export	11,900	1,110 r/	1,270	4,930

r/ Revised.

 ${\bf TABLE~2} \\ {\bf U.S.~REPORTED~PRODUCTION~AND~SHIPMENTS~OF~MOLYBDENUM~PRODUCTS~1/} \\$

(Metric tons, contained molybdenum)

	1999			
	January-			Year to
	December	April	May	date
Gross production	39,800	3,290	3,630	18,100
Internal consumption 2/	20,500	1,610	1,890	9,410
Gross shipments	39,000	3,310	3,310	17,400

^{1/} Data are rounded to no more than three significant digits; may not add to totals shown.

TABLE 3 U.S. REPORTED CONSUMPTION, BY END USES, AND CONSUMER STOCKS OF MOLYBDENUM MATERIALS 1/

(Kilograms, contained molybdenum)

	36111	Ferro	Ammonium	Molyb-		
	Molybdic	molyb-	and sodium	denum		
End use	oxides	denum 2/	molybdate	scrap	Other	Total
2000, April:	_					
Steel:	_					
Carbon	14,800	W			3,190	18,000
High-strength low-alloy	_ 35,300	8,690				44,000
Stainless and heat-resisting	278,000	45,300			4,760	328,000
Full alloy	177,000	153,000			2,330	332,000
Tool	W	3,720			1,450	5,170
Total	505,000	211,000			11,700	727,000
Cast irons (gray, malleable, and ductile iron)	2,300	30,300			763	33,300
Superalloys	96,800	W		(3/)	88,800	186,000
Alloys: (other than steels, cast irons, and superalloys)	_					
Welding materials (structural and hard-facing)		W			6	6
Other alloys	122	3,110			6,290	9,520
Mill products made from metal powder 4/					199,000	199,000
Cemented carbides and related products 5/					45	45
Chemical and ceramic uses:	_					
Pigments			1,270			W
Catalysts	77,300		W		W	77,300
Other	W				1,710	1,710
Miscellaneous and unspecified uses:	_					
Lubricants					14,500	14,500
Other	24,700	25,900	74,800		14,900	140,000
Grand total	706,000	270,000	76,100		337,000	1,390,000
Stocks, April 30, 2000	609,000	189,000	4,840	35,900	852,000	1,690,000
7 0 11						

See footnotes at end of table.

^{1/} Data are rounded to no more than three significant digits; may not add to totals shown.

^{2/} Includes molybdic oxides, metal powder, ammonium molybdate, sodium molybdate, and other.

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TABLE 3--Continued U.S. REPORTED CONSUMPTION, BY END USES, AND CONSUMER STOCKS OF MOLYBDENUM MATERIALS 1/

(Kilograms, contained molybdenum)

	Malvhdia	Ferro	Ammonium and sodium	Molyb- denum		
End use	Molybdic oxides	molyb- denum 2/	molybdate	scrap	Other	Total
2000, May:	Oxides	denum 2/	morybuate	scrap	Oulei	Total
Steel:	-					
Carbon	34,300	25,300			3,190	62,800
High-strength low-alloy	37,100	9,090				46,200
Stainless and heat-resisting	254,000	35,400			4,760	294,000
Full alloy	151,000	161,000			2,330	314,000
Tool	W	W			1,450	1,450
Total	476,000	230,000			11,700	718,000
Cast irons (gray, malleable, and ductile iron)	2,000	34,400			763	37,200
Superalloys	70,100	W		(3/)	68,600	139,000
Alloys: (other than steels, cast irons, and superalloys)	-					
Welding materials (structural and hard-facing)		W			6	6
Other alloys	W	3,640			6,210	9,850
Mill products made from metal powder 4/					193,000	193,000
Cemented carbides and related products 5/					30	30
Chemical and ceramic uses:	_					
Pigments			2,250			2,250
Catalysts	77,300		W		W	77,300
Other	W				2,150	2,150
Miscellaneous and unspecified uses:	-					
Lubricants					14,900	14,900
Other	90,700	40,300	74,800		14,900	221,000
Grand total	716,000	309,000	77,100		313,000	1,410,000
Stocks, May 31, 2000	703,000	186,000	4,840	27,200	850,000	1,770,000

W Withheld to avoid disclosing company proprietary data; included in "Other" of the "Miscellaneous and unspecified uses" category. -- Zero.

TABLE 4
U.S. EXPORTS OF MOLYBDENUM ORES AND CONCENTRATES (including roasted concentrate), BY COUNTRY 1/

(Kilograms, contained molybdenum)

	1999	1999 2000		
Country	January-December	March	April	Year to date
Australia	41,100	9,510		16,100
Belgium	4,740,000	542,000	589,000	1,680,000
Brazil	66,800	3,840	3,520	10,000
Canada	1,350,000	133,000	120,000	703,000
Chile	2,420,000	21,600		27,800
China	1,190,000	68,800	62,000	600,000
Germany	122,000	33,900	34,000	379,000
Italy	264,000	5,620	17,300	79,400
Japan	2,320,000	271,000	320,000	958,000
Korea, Republic of	210,000	723	1,480	3,670
Mexico	129,000		39,400	41,000
Netherlands	8,620,000	526,000	522,000	2,590,000
Spain	25,100			11,400
Sweden	613,000	24,000	12,000	154,000
United Kingdom	5,530,000	237,000	894,000	1,750,000
Other	207,000	1,450	4,280	20,300
Total	27,900,000	1,880,000	2,620,000	9,020,000

⁻⁻ Zero.

Source: Bureau of the Census.

^{1/} Data are rounded to no more than three significant digits; may not add to totals shown.

^{2/} Includes calcium molybdate.

^{3/} Included in "Other" of the "Superalloys" category.

^{4/} Includes ingot, wire, rod, and sheet.

^{5/} Includes construction, mining, oil and gas, metal working machinery.

^{1/} Data are rounded to no more than three significant digits; may not add to totals shown.

 ${\bf TABLE~5} \\ {\bf U.S.~EXPORTS~OF~FERROMOLYBDENUM,~BY~COUNTRY~1/}$

(Kilograms, contained molybdenum)

	1999		2000	
	January-December	March	April	Year to date
Australia	1,471			1,144
Canada	561,000	20,800	79,800	207,000
China	209,000			
Japan	49,800		9,600	22,000
Korea, Republic of	11,000			
Mexico	79,700	13,900	14,800	38,300
Other	599			
Total	913,000	34,700	104,000	268,000

⁻⁻ Zero.

Source: Bureau of the Census

 ${\bf TABLE~6}$ U.S. IMPORTS FOR CONSUMPTION OF MOLYBDENUM PRODUCTS 1/

(Kilograms unless otherwise specified)

	January-December 1999				April 2000			
	Gross	Contained	Value (c.i.f.)	Gross	Contained	Value (c.i.f.)		
Material	weight	molybdenum	(thousands)	weight	molybdenum	(thousands)		
Ore and concentrates roasted	8,020,000	5,090,000	\$39,600	225,000	125,000	\$954		
Ore and concentrates other	2,710,000	1,480,000	7,810	346,000	201,000	1,060		
Molybdenum chemicals:								
Oxides and hydroxides	1,180,000	NA	9,610	151,000	NA	814		
Molybdates of ammonium	1,240,000	684,000	8,980	127,000	74,600	652		
Molybdates (all others)	192,000	114,000	982					
Molybdenum orange	2,050,000	NA	7,950	94,400	NA	377		
Ferromolybdenum	7,690,000	4,830,000	44,000	674,000	419,000	2,720		
Molybdenum powders	110,000	103,000	3,210	64	11,200	293		
Molybdenum unwrought	145,000	137,000	2,110	19	19	23		
Molybdenum waste and scrap	296,000	292,000	4,080	44,200	44,000	549		
Molybdenum wire	5,530	NA	500	235	NA	24		
Molybdenum other	7,850	NA	1,650	480	NA	109		
Total	23,700,000	12,700,000	130,000	1,660,000	875,000	7,580		

NA Not available. -- Zero.

Source: Bureau of the Census.

^{1/} Data are rounded to no more than three significant digits; may not add to totals shown.

 $^{1/\,\}text{Data}$ are rounded to no more than three significant digits; may not add to totals shown.